

To: Albright, David[Albright.David@epa.gov]
From: Rao, Kate
Sent: Tue 7/12/2016 7:43:16 PM
Subject: FW: Needed TDM for Sunrise Power
Ltr to Sunrise Power Plant - 11JUL2016 Comments on Tech Review jc.doc
Comments on NRG responses-Amended permit renewal application 21Jan2016.docx
Midway-Sunset Oil Field DOGGR Documents Well Locations.pdf
Sunrise Well locations.docx

FYI -

Kate Rao
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From: Rao, Kate
Sent: Tuesday, July 12, 2016 12:23 PM
To: Coffman, Joel <Coffman.Joel@epa.gov>
Subject: FW: Needed TDM for Sunrise Power
Importance: High

Joel – please see below for revised TDM. Make any edits/changes as needed. Hopefully I captured what you need.

Kate

Contract No. EP-C-15-022 Workplan Assignment No. 1-90

R9 Tech Support for Implementation of the UIC Program [Task 1; Subtask 1.2 - Permit Application Review/Technical Review Analysis]

Technical Direction – NRG-Sunrise Power Company, LLC - Class I Nonhazardous UIC Permit #CA1020002; Re-application

Background: Sunrise Power Company, LLC (Sunrise) has submitted a renewal application to operate Class I nonhazardous UIC wells for another 10 years. This is a re-submission of the renewal application. Sunrise has submitted several renewal applications and EPA has issued 4 separate notices of Technical Deficiencies.

We issued a TDM on 11/24/2015 to conduct a tech review analysis on Sunrise's April 2015 revised renewal permit application. Comments were submitted on 1/21/2016 and the TDM was closed on 2/29/2016.

We have recently made a determination that if an aquifer has been exempted as part of the CA Class II UIC program, we will use that determination to exempt it for Class I injection activity. Based on recent material submitted by Sunrise (see Midway-Sunset Oil Field DOGGR Documents Well Locations.pdf and Sunrise Well locations.docx), we believe that the location of the injection wells under the renewal permit are located in an existing exempted aquifer.

We are in the process of drafting a letter of deficiency to Sunrise and need to include an updated discussion on aquifer exemptions related to this proposed permit application.

Action: Under Task 1, Subtask 1.2 -- Technical Review Analysis, review the attached draft letter of deficiency to Sunrise, based on Cadmus' 1/26/2016 tech review comments, renewal and provide comments or edits as needed. Specific attention needs to be directed to the discussion on item 40 (Pages 2-4 & S-5, Aquifer Exemption for Upper Tulare Formation) given our position that if an aquifer has been exempted for the CA Class II UIC Program, we consider it exempted for Class I injection too.

Aquifer Exemption language/clarification may include: clear maps of Sunrise interpretations of the shaded area from the 1981 California Class II primacy application maps, rationale for stating this zone is exempted for Class II injection, administrative oil field boundaries on the maps from the renewal application, shaded aquifer exemption boundary information and the administrative

boundary of the Midway-Sunset field needs to be shown on Figures B-1, B-2, F-4, F-5, F-6, P-1 and S-1, and request for cross sections or contour maps.

Deliverable: Provide comments (redline/edited version) of the attached draft letter of deficiency letter. Deliverable should be emailed in WORD to Kate Rao and Joel Coffman.

Estimated LOE: 20 hours/LOE

Schedule: Due 8 weeks for the date of this TDM (7/5/2016).

Material to review:

- 1/21/2016: Summary of Cadmus' tech review of 11/9/2015 revised renewal permit.
- 11/9/2015: CD with revised renewal permit. (note: already sent to Cadmus)
- Midway-Sunset Oil Field DOGGR Documents Well Locations.pdf
- Sunrise Well locations.docx

Project Tracking: Please track the LOE and cost for this project (per month and life of project).

Additional Information:

- Travel is not expected for this project.
- Joel Coffman is the EPA technical lead.
- EPA has previously made the determination that the permit application is administratively complete.
- Conference calls between EPA and Cadmus will be scheduled as needed to discuss this work request.

Kate Rao
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From: Coffman, Joel
Sent: Monday, June 27, 2016 1:20 PM
To: Rao, Kate <Rao.kate@epa.gov>
Cc: Albright, David <Albright.David@epa.gov>; Dermer, Michele <Dermer.Michele@epa.gov>
Subject: Needed TDM for Sunrise Power
Importance: High

Kate: Below is what I need Jim Walker (Cadmus) to look at, if possible. Joel

Contract No. EP-C-15-022 Workplan Assignment No. 0-90

R9 Tech Support for Implementation of the UIC Program [Task 1; Subtask 1.2 - Permit Application Review/Technical Review Analysis]
Technical Direction – NRG-Sunrise Power Company, LLC - Class I Nonhazardous UIC Permit #CA1020002; Re-application

Background: Sunrise Power Company, LLC (Sunrise) has submitted a renewal application to operate Class I nonhazardous UIC wells for another 10 years. This is a re-submission of the renewal application. Sunrise has submitted several renewal applications and EPA has issued 4 separate notices of Technical Deficiencies.

Action: Under Task 1, Subtask 1.2 -- Technical Review Analysis follow-up to technical responses from Cadmus dated January 21, 2016 . As information, we are no longer clarifying whether an area has been exempted as Class II but not Class I. We have taken the position that if the state has exempted an aquifer or a portion of an aquifer as Class II, we consider it exempt for Class I by definition of a USDW and if the state will not or has not exempted an aquifer for

Class II injection, then EPA will not exempt it for Class I injection.

Review attached draft letter and add to it any pertinent information needed for clarification, i.e. clear maps of Sunrise interpretations of the shaded area from the 1981 California Class II primacy application maps (their rationale for stating this zone is exempted for Class II injection), including the administrative oil field boundaries on the maps from the renewal application (shaded aquifer exemption boundary information and the administrative boundary of the Midway-Sunset field needs to be shown on Figures B-1, B-2, F-4, F-5, F-6, P-1 and S-1) . Any cross sections or contour maps that Sunrise needs to provide should be described also.

Deliverable: Provide a technical analysis report summarizing the results of the technical review of Sunrise's revised renewal application based on EPA's most recent letter of deficiency. Expound on draft letter (attached) addressed to Sunrise and your report should include an itemized list of additional information necessary to clarify, modify, or supplement the permit application material to address all identified technical deficiencies. Deliverable should be emailed in WORD to Kate Rao and Joel Coffman.

Estimated LOE: 20 hours/LOE

Schedule: Due 8 weeks for the date of this TDM (7/5/2016).

Material to review:

Materials used to prepare January 21, 2016 review letter and the attached draft letter with comments dated July 11, 2016

Project Tracking: Please track the LOE and cost for this project (per month and life of project).

Additional Information:

- Travel is not expected for this project.
- Joel Coffman is the EPA technical lead.
- EPA has previously made the determination that the permit application is administratively complete.
- Most recent renewal application package was received by EPA on April 1, 2015, the technical

responses including a revised application package were received on November 9, 2015 and were previously mailed per instructions from Cadmus.

- Conference calls between EPA and Cadmus will be scheduled as needed to discuss this work request.

Joel Coffman Groundwater UIC Office

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